Application Number TRANSMITTAL Filing Date **FORM** First Named Inventor Art Unit (to be used for all correspondence after initial filing) Examiner Name

Signature

May 10, 2004

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE r the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. 09/751.025 December 29, 2000 Jonathan W. Hubbs 1755 David M. Brunsman Attorney Docket Number 29092.00011 Total Number of Pages in This Submission **ENCLOSURES** (Check all that apply) After Allowance communication ~ Fee Transmittal Form Drawing(s) to Technology Center (TC) Appeal Communication to Board Licensing-related Papers Fee Attached of Appeals and Interferences Appeal Communication to TC Petition (Appeal Notice, Brief, Reply Brief) Amendment/Reply Petition to Convert to a Proprietary Information After Final Provisional Application Power of Attorney, Revocation Affidavits/declaration(s) Status Letter Change of Correspondence Address Other Enclosure(s) (please Terminal Disclaimer Extension of Time Request Identify below): Return Postcard Request for Refund **Express Abandonment Request** CD, Number of CD(s) Information Disclosure Statement Remarks Certified Copy of Priority Document(s) Response to Missing Parts/ Incomplete Application Response to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm David E. Rogers Reg. No. 38, 287 Individual name Squire, Sanders & Dempsey Signature Date May 10, 2004 CERTIFICATE OF TRANSMISSION/MAILING I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. Typed or printed name Lisa Mansur Date

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Effective 10/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

Complete if Known				
Application Number	09/751,025			
Filing Date	December 29, 2000			
First Named Inventor	Jonathan W. Hubbs	-		
Examiner Name	David M. Brunsman			
Art Unit	1755			
Attorney Docket No.	29092.00011			

METHOD OF PAYMENT (check all that apply)	FEE CALCULATION (continued)						
Check Credit card Money Other None		3. ADDITIONAL FEES					
Order Order		Entity	Small	Entity			
Denosit		Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid	
Account Number 19-3878	Code 1051	130	2051		Surcharge - late filing fee or oath	ree raiu	
Deposit Account Squire, Sanders & Dempsey	1052	50	2052	25	Surcharge - late provisional filing fee or		
Name	1053	130	1053	130	cover sheet Non-English specification		
The Director is authorized to: (check all that apply) Charge fee(s) indicated below Credit any overpayments		2,520	1812		For filing a request for ex parte reexamination		
Charge fee(s) indicated below Credit any overpayments Charge any additional fee(s) or any underpayment of fee(s)	1804	920*	1804		Requesting publication of SIR prior to		
Charge fee(s) indicated below, except for the filling fee					Examiner action		
to the above-identified deposit account.	1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action		
FEE CALCULATION	1251	110	2251	55	Extension for reply within first month		
1. BASIC FILING FEE		420	2252	210	Extension for reply within second month		
Large Entity Small Entity	1253	950	2253	475	Extension for reply within third month		
Fee Fee Fee Fee Fee Description Fee Paid Code (\$) Code (\$)	1254	1,480	2254	740	Extension for reply within fourth month		
1001 770 2001 385 Utility filing fee	1255	2,010	2255	1,005	Extension for reply within fifth month		
1002 340 2002 170 Design filing fee	1401	330	2401	165	Notice of Appeal		
1003 530 2003 265 Plant filing fee	1402	330	2402	165	Filing a brief in support of an appeal	330	
1004 770 2004 385 Reissue filing fee	1403	290	2403	145	Request for oral hearing		
1005 160 2005 80 Provisional filing fee	1451	1,510	1451	1,510	Petition to institute a public use proceeding		
SUBTOTAL (1) (\$) 0	1452	110	2452	55	Petition to revive - unavoidable		
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE	1453	1,330	2453	665	Petition to revive - unintentional		
Fee from	1501	1,330	2501		Utility issue fee (or reissue)		
Extra Claims below Fee Paid		480	2502		Design issue fee		
		640 130	2503 1460		Plant issue fee		
					Petitions to the Commissioner		
Large Entity Small Entity		50	1807		Processing fee under 37 CFR 1.17(q)		
Fee Fee Fee Fee Description	1806	180	1806		Submission of Information Disclosure Stmt Recording each patent assignment per		
Code (\$) Code (\$) 1202 18 2202 9 Claims in excess of 20	8021	40	802	1 40	Recording each patent assignment per property (times number of properties)		
1201 86 2201 43 Independent claims in excess of 3	1809	770	2809	9 385	Filing a submission after final rejection (37 CFR 1.129(a))		
1203 290 2203 145 Multiple dependent claim, if not paid	1810	770	2810	385	For each additional invention to be		
1204 86 2204 43 ** Reissue independent claims over original patent	1801	770	2801	205	examined (37 CFR 1.129(b)) Request for Continued Examination (RCE)		
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and over original patent		555	1		of a design application		
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**or number previously paid, if greater; For Reissues, see above	Redu	iced by	Basic	Filing F	ee Paid SUBTOTAL (3) (\$) 330		

SUBMITTED BY					(Complete ((if applicable))	
Name (Print/Type)	David E. Rogers	D 1	Registration No. (Attorney/Agent)	38,287	Telephone	602-528-4122	
Signature	3 June	100000			Date	May 10, 2004	

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CERTIFICATE OF MAILING PURSUANT TO 37 C.F.R. §1.8

I, <u>Lisa Mansur</u>, hereby certify that the below-identified Brief on Appeal, pursuant to 37 C.F.R. §1.8, is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450,

on:

May 10, 2004

By Lisa Mansier

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of Stabilizer Solutions, Inc.

Atty. Docket No: 29092.00011

Appln. No.: 09/751,025

Group Art Unit: 1755

Filed: December 29, 2000

Examiner: David M. Brunsman

Title: MALLEABLE SURFACE MATERIAL

Mail Stop Appeal Brief-Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

BRIEF ON APPEAL

Pursuant to 37 C.F.R. § 1.192, Appellant, Stabilizer Solutions, Inc., submits this brief in triplicate and with the required fee under 37 C.F.R. § 1.17(c), appealing the final rejection of the claims of the above-identified application under 35 U.S.C. §§ 112, paragraph one, and 102(b). This brief is timely filed as specified under 37 C.F.R. §1.192(a).

The Commissioner is hereby authorized to charge any fees which may be required for the filing of this Appeal Brief, or credit any overpayment to Deposit Account No. 19-3878.

I. REAL PARTY IN INTEREST.

Stabilizer Solutions, Inc., a corporation organized and existing under the laws of the State of Arizona, is the real party in interest for this appeal.

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II. <u>RELATED APPEALS AND INTERFERENCES</u>.

There are no related appeals or interferences.

III. STATUS OF CLAIMS.

Claims 1-38 and 41-46 are pending in this application, are subject to this appeal and are reproduced in Appendix A. The claims stand finally rejected as follows:

- (1) Claims 1-38 and 41-46 under 35 U.S.C. § 112, paragraph one, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention..
- (2) Claims 37-38 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,925,493 issued to Lamoreaux on May 15, 1990 (hereafter "Lamoreaux").

IV. STATUS OF AMENDMENTS.

There are no pending, unentered amendments.

V. SUMMARY OF THE INVENTION.

The present invention relates to a surface material used to form an improved surface. Specification Page 3, Il. 18-19. Suitable applications are ball fields, particularly pitcher's mounds, although the invention may be used in any suitable application. The material can be refinished without adding water (although water can be added), is relatively dust free and water resistant. Page 3, I. 23 – Page 4, I. 1.

The material is a mixture of wax and clay that preferably also includes some sand or decomposed granite. Page 4, ll. 4-6. The resultant product is a surface that cleats can penetrate but that resists having divots pulled out of it when the cleats are removed. Page 4, ll. 6-7.

The method of the invention involves treating one or more materials, such as clay, sand, silt, soil and/or decomposed granite. Page 4, ll. 12-13. The method involves adding wax to the material(s) and the resultant product is a malleable surface material. Page 4, ll. 15-16.

A surface according to the invention should provide the following benefits: (1) little or no need to water it to reduce dust or to maintain the surface at the proper consistency, (2) relatively good water resistant so that it does not get muddy, and (3) cohesiveness and malleableability for relatively easy repair. Page 4, Il. 18-25.

VI. ISSUES.

The issues for consideration in this appeal are:

- A. Whether the Examiner erred in rejecting claims 1-38 and 41-46 under 35 U.S.C. § 112, paragraph one, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
- B. Whether the Examiner erred in rejecting claims 37-38 under 35 U.S.C. § 102(b) as being anticipated by Lamoreaux.

VII. GROUPING OF CLAIMS.

Appellant argues the patentability of claims 1-36, 37-38 and 41-43, and 44-46 separately. Accordingly, claim sets (a) 1-36, (b) 37-38 and 41-43, and (c) 44-46 do not stand or fall together. Appellant considers these sets of claims to be separately patentable for the reasons set forth below in the Argument section of this brief. Claims 2-36 stand or fall with claim 1; claims 38 and 41-43 stand or fall with claim 37; claims 45 and 46 stand or fall with claim 44.

VIII. ARGUMENT.

A. Rejection of Claims 1-38 and 41-46 under 35 U.S.C. §112, First Paragraph.

Claims 1-38 and 41-46 stand rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which was not disclosed in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In essence, the Examiner has taken the position that the claims are not enabled because:

1. There is a statement in the summary of the invention section that the invention is particularly suited for use in an application where the surface should be (a) firm, and (b) malleable enough (i) to allow for the penetration of cleats, (ii) to allow for relatively easy repair, and (iii) to avoid being pulled out in clumps, thereby creating divots, upon removal of the cleats. The Examiner apparently takes the position that at least some of these benefits of the invention must be incorporated into the claims.

2. The specification lists two preferred embodiment waxes and the Examiner takes the position that the claims must be limited to these preferred embodiments.

Appellant traverses the rejection of the claims under 35 U.S.C. § 112 ¶ 1 because (1) there is no requirement that claims recite benefits that may be derived from utilizing the invention, and (2) the claimed invention should not be limited to the preferred embodiments of wax since this is a relatively predictable art and, given the teachings of this Application, one skilled in the art could make and use the full scope of the claimed invention without undue experimentation.

1. The Law of Enablement.

In order to make a rejection for lack of enablement, the examiner has the initial burden to establish a reasonable basis to question the enablement provided for the claimed invention. In re Wright, 999 F.2d 1557, 1562, 27 USPQ2d 1510, 1513 (Fed.Cir. 1993) (examiner must provide a reasonable explanation as to why the scope of protection provide by a claim is not adequately enabled by the disclosure). "It is incumbent upon the Patent Office, whenever a rejection on this basis is made, to explain why it doubts the truth or accuracy of any statement in a supporting disclosure and to back up assertions of its own with acceptable evidence or reasoning which is inconsistent with the contested statement. Otherwise, there would be no need for the appellant to go to the trouble and expense of supporting his presumptively accurate disclosure." In re Cook, 439 F.2d at 224, 169 USPQ at 370.

In such a case, the examiner should specifically identify what information is missing and explain why one skilled in the art could not supply the information without undue experimentation. See MPEP § 2164.06(a). References should be supplied if possible to support a prima facie case of lack of enablement, but are not always required. In re Marzocchi, 439 F.2d 220, 224, 169 USPQ 367, 370 (CCPA 1971). However, specific technical reasons are always required.

Further, even the fact that experimentation may be complex does not necessarily make it undue, if the art typically engages in such experimentation. In re Certain Limited-Charge Cell Culture Microcarriers, 221 USPQ 1165, 1174 (Int'l Trade Comm'n 1983), aff'd. sub nom.,

Massachusetts Institute of Technology v. A.B. Fortia, 774 F.2d 1104, 227 USPQ 428 (Fed. Cir. 1985). See also In re Wands, 858 F.2d at 737, 8 USPQ2d at 1404. The test of enablement is not whether any experimentation is necessary, but whether, if experimentation is necessary, it is undue. In re Angstadt, 537 F.2d 498, 504, 190 USPQ 214, 219 (CCPA 1976).

2. Rejection Based on Failure to Claim Benefits of the Invention.

The Examiner has taken the position that each pending claim is indefinite because appellant has not recited some of the benefits of the invention, <u>i.e.</u>, that the claims do not state that the claimed invention is "firm, malleable enough to allow cleat penetration and easy repair, resistant to being pulled up in clumps, dust free and water resistant." The Examiner has not specified any law or USPTO regulations supporting his position, nor has Appellant found any. The requirement for a proper claim under 35 U.S.C. § 112 is that "[t]he specification shall

conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the appellant regards as the invention." Therefore, only the subject matter of the invention needs to appear in the claims. There is no requirement that the claims recite benefits that may be obtained by utilizing the invention. Thus, this rejection is improper and should be removed.

3. Rejection of Claims for Failure to Include the Preferred Embodiments of Wax.

The Examiner has also taken the position that the invention is limited to the preferred embodiments of wax described in the Detailed Description section, and argues that the specification does not "teach" someone skilled in the art how to determine which wax to use except for the preferred embodiments. Appellant traverses this position because the Examiner has not provided objective reasoning as to why one skilled in the art could not make and use the claimed invention without undue experimentation.

a. The Examiner Has Failed To Provide Sufficient Evidence <u>To Rebut The Presumption That The Specification Is Enabling.</u>

There are many factors to be considered when determining whether there is sufficient evidence to support a determination that a disclosure does not satisfy the enablement requirement and whether any necessary experimentation is "undue." These factors include, but are not limited to:

- (A) The breadth of the claims;
- (B) The nature of the invention;
- (C) The state of the prior art;
- (D) The level of one of ordinary skill;
- (E) The level of predictability in the art;
- (F) The amount of direction provided by the inventor;

- (G) The existence of working examples; and
- (H) The quantity of experimentation needed to make or use the invention based on the content of the disclosure.

MPEP § 2164.01(a); <u>In re Wands</u>, 858 F.2d 731, 737, 8 UPSQ2d 1400, 1404 (Fed.Cir. 1988) (reversing the PTO's determination that claims directed to methods for detection of hepatitis B surface antigens did not satisfy the enablement requirement).

The Examiner's only argument for finding that the specification is not enabling is that the specification states the obvious, i.e., that not all waxes will work in the invention. This statement by Appellant is not objective, technical reasoning sufficient to establish a rejection for lack of enablement under 35 U.S.C. § 112 ¶ 1. The Examiner has not considered at least the nature of the invention, the state of the prior art (which, as explained below, supports Appellant's position that the specification is enabling), or the level of predictability of the art. Thus, the Examiner has not established an objective basis to reject the claims for lack of enablement under 35 U.S.C. § 112 ¶ 1 and to limit the claims to the preferred embodiments. The rejections under 35 U.S.C. § 112 ¶ 1 should be traversed for this reason alone.

b. The Claims Are Not Limited to the Preferred Embodiments.

First, as a matter of law patents are generally not limited to the preferred embodiments unless explicitly stated in the specification. The present specification contains no statements or teachings limiting the invention to the two preferred embodiment waxes. In fact, the only limitation on the wax that may be used is that the wax "make the surface material malleable" and "add cohesiveness to the particles." Specification, page 6, ll. 11-12. Any wax capable of

performing these functions may be used. Page 6, ll. 12-13. This teaches one of ordinary skill in the art the nature of the wax to be used.

Second, the Examiner argues that since the background teaches that there are combinations of soil, clays and organic binders that fail to perform the functions required of the invention, there are a significant number of combinations falling within the scope of the claims that are inoperable. Even if that were so, that is not the test for enablement under 35 U.S.C. § 112 (and if that were true, virtually all claims would lack enablement since anyone could concoct numerous inoperable embodiments technically falling within the scope of a claim). See United States v. Telectronics, Inc., 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988) ("The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation.").

A patent specification does not have to explicitly "teach" someone how to determine if a particular product falls within the claimed scope of the invention. As long as the specification discloses at least one method for making and using the claimed invention that bears a reasonable correlation to the entire scope of the claim, then the enablement requirement of 35 U.S.C. § 112, paragraph 1 is satisfied. In this case those skilled in the art know how to make the invention utilizing a suitable wax without undue experimentation, and the Examiner has provided no objective reasoning to the contrary. In re Fisher, 427 F.2d 833, 839, 166 USPQ 18, 24 (CCPA 1970) (Failure to disclose other methods by which the claimed invention may be made does not

render a claim invalid under 35 U.S.C. 112): <u>Spectra-Physics, Inc. v. Coherent, Inc.</u>, 837 F.2d 1524, 1533, 3 USPQ2d 1737, 1743 (Fed. Cir.), <u>cert. denied</u>, 484 U.S. 954 (1987).

Further, even in unpredictable arts, a disclosure of every operable species is not required. A single embodiment may provide broad enablement in cases involving predictable factors, such as mechanical or electrical elements. In re Vickers, 141 F.2d 522, 526-27, 61 USPQ 122, 127 (CCPA 1944); In re Cook, 439 F.2d 730, 734, 169 USPQ 298, 301 (CCPA 1971). Here, the invention is in a fairly predictable art field. The invention is a mixture of wax and clay and may include other types of soil, such as sand or silt, and/or other ingredients. One skilled in the art would know through simple trial and error the wax that would and would not work in the invention. In re Colianni, 561 F.2d 220, 224, 195 USPQ 150, 153 (CCPA 1977) (Even "an extended period of experimentation may not be undue if the skilled artisan is given sufficient direction or guidance."); In re Wands, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988) ("The test is not merely quantitative, since a considerable amount of experimentation is permissible, if it is merely routine, or if the specification in question provides a reasonable amount of guidance with respect to the direction in which the experimentation should proceed.") (citing In re Angstadt, 537 F.2d 489, 502-04, 190 USPQ 214, 217-19 (CCPA 1976)).

Finally, Appellant notes that the claims of prior art references are not limited to any particular type of wax, which is strong evidence that persons skilled in this art know how to select appropriate waxes. Appellant directs the Board to prior art patents that are of record in this Application: U.S. Patent No. 5,961,389 to Dickenson claims "hydrocarbon wax" and

"polymer particle" and provides no specific embodiments of either; and U.S. Patent No. 5,711,795 to Browning, which simply claims wax and discloses a broad genus of waxes but only specifically discloses just one preferred embodiment. Column 4, Il. 8-20.

B. Rejection of Claims 41-46 Under 35 U.S.C. §102(b) in view of Lamoreaux.

Claims 37 and 38 stand rejected under 35 U.S.C. 102(a) as anticipated by Lamoreaux. In order to sustain a valid §102 rejection, the reference must teach every element of the claim.

MPEP §2131.01. This rejection must be withdrawn since Lamoreaux does not teach each and every element of claim 37 nor claim 38.

Claim 37 recites, in part, "a dry density of between 100 and 115 lbs/ft" and "an unconfined compressive strength of between 10 and 100psi." At least these limitations are not disclosed, taught or suggested by Lamoreaux. Therefore, claim 37 is not anticipated by Lamoreaux.

Claim 38 recites, in part "a shear strength of between 5 and 50 psi." At least this limitation is not disclosed, taught or suggested by Lamoreaux. Therefore, claim 38 is not anticipated by Lamoreaux and is in condition for all allowance.

IX. CONCLUSION.

The rejections for lack of enablement under 35 U.S.C. § 112 ¶ 1 should be traversed because (1) there is no requirement that claims recite benefits that may be derived from using the claimed invention, and (2) the Examiner has not provided technical evidence to establish that persons skilled in the art could not make the claimed invention without undue experimentation.

APPELLANT'S BRIEF U.S. Appln. No. 09/751,025

The rejection of claims 37-38 under 35 U.S.C. § 102 as being anticipated by Lamoreaux should be traversed since Lamoreaux fails to teach each and every limitation of the inventions recited in those claims.

The Examiner is invited to telephone the undersigned at the telephone number listed below if it would in any way advance prosecution of this case.

Respectfully submitted,

Dated: 5-10 -04

David E. Rogers Reg. No. 38,287

SQUIRE, SANDERS & DEMPSEY L.L.P. Two Renaissance Square 40 North Central Avenue, Suite 2700 Phoenix, Arizona 85004-4498

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APPENDIX A

Claim 1 (Previously Presented) A surface material comprising:

- (a) 10-30% clay particles;
- (b) 30-80% decomposed granite particles; and
- (c) 10-40% wax of a type to make the surface material malleable and to add cohesiveness between the particles.
- Claim 2 (Original) The surface material of claim 1 wherein the clay is dry clay.
- Claim 3 (Original) The surface material of claim 2 wherein the dry clay is bentonite.
- Claim 4 (Original) The surface material of claim 1 wherein the clay is bentonite.
- Claim 5 (Original) The material of claim 1 wherein the wax has a drop melt point of about 166° F.
- Claim 6 (Original) The material of claim 1 wherein the wax has a congealing point of between 150° F and 167° F.
- Claim 7 (Original) The material of claim 1 wherein the wax has a kinematic viscosity between 16 and 23
- Claim 8 (Original) The material of claim 1 wherein the wax has a kinematic viscosity between 6.7 and 7.8.
- Claim 9 (Original) The material of claim 1 wherein the wax has a kinematic viscosity between 6.7 and 23.

Claim 10 (Original) The material of claim 1 wherein the wax has a Saybolt viscosity between 81.8 and 111.4.

Claim 11 (Original) The material of claim 1 wherein the wax has a Saybolt viscosity between 48.1 and 51.8.

Claim 12 (Previously Presented) A surface material made by the method of mixing clay with emulsified wax of a type to make the surface material malleable and to add cohesiveness between the particles.

Claim 13 (Previously Presented) The surface material of claim 12 wherein the wax is emulsified in water.

Claim 14 (Previously Presented) The surface material of claim 13 wherein the wax is liquid while emulsified.

Claim 15 (Previously Presented) The surface material of claim 14 wherein the wax is a microaryotalline based slack wax.

Claim 16 (Previously Presented) The surface material of claim 12 wherein the surface material is dried after the clay and emulsified wax are mixed.

Claim 17 (Previously Presented) The surface material of claim 12 that further comprises the step of placing a layer of the surface material on a surface.

Claim 18 (Previously Presented) The surface material of claim 17 wherein the layer is between 2" and 6" deep.

Claim 19 (Previously Presented) The surface material of claim 17 wherein the surface material is dried before placing it on the surface.

Claim 20 (Previously Presented) The surface material of claim 17 that further includes the step of transporting the surface material prior to placing a layer on the surface.

Claim 21 (Previously Presented) The surface material of claim 20 wherein the mixture is at least partially covered with a moisture-proof barrier during the step of transporting.

Claim 22 (Previously Presented) The surface material of claim 12 wherein the surface material further comprises decomposed granite and is made by the method of mixing decomposed granite, clay and emulsified wax.

Claim 23 (Previously Presented) The surface material of claim 12 wherein neither the clay nor the wax are heated prior to or during the mixing step.

Claim 24 (Previously Presented) The surface material of claim 21 wherein the moisture-proof barrier is comprised of plastic.

Claim 25 (Previously Presented) The surface material of claim 12 wherein, the emulsified wax is placed onto a surface comprising clay prior to mixing the clay and emulsified wax.

Claim 26 (Previously Presented) The surface material of claim 12 wherein the surface material further comprises silt and is formed by the method of mixing silt, clay and emulsified wax.

Claim 27 (Previously Presented) The surface material of claim 25 that further includes the step of mixing the wax with the surface material to form a mixture.

Claim 28 (Previously Presented) The surface material of claim 25 wherein the mixing is done by tilling the mixture by hand.

Claim 29 (Previously Presented) The surface material of claim 25 that further includes the step of compressing the mixture of wax and surface material.

Claim 30 (Previously Presented) The surface material of claim 29 wherein the mixture is compressed using a roller.

Claim 31 (Previously Presented) The surface material of claim 25 wherein neither the soil material nor the emulsified wax is heated prior to or during mixing.

Claim 32 (Previously Presented) The surface material of claim 12 wherein the surface material includes gravel.

Claim 33 (Previously Presented) The surface material of claim 12 wherein the surface material includes organic binder.

Claim 34 (Previously Presented) The surface material of claim 33 wherein the organic binder is dried and ground plantago.

Claim 35 (Previously Presented) The surface material of claim 34 wherein the dried and ground plantago consists of 80% or more plantago husk.

Claim 36 (Previously Presented) The surface material of claim 25 wherein the surface material is part of a pitcher's mound.

Claim 37 (Previously Presented) A surface material comprising wax of a type to make the surface material malleable and to add cohesiveness between the particles and clay and having the following properties:

- (a) A dry density of between 100 and 115 lbs/ft; and
- (b) An unconfined compressive strength of between 10 and 100 psi, wherein there is not brittle failure of the surface material.

Claim 38 (Original) The surface material of claim 37 that further includes a shear strength of between 5 and 50 psi.

APPELLANT'S BRIEF U.S. Appln. No. 09/751,025

Claims 39-40 (cancelled)

Claim 41 (Original) The surface material of claim 37 that further includes a shear strength of between 5 and 50 psi.

Claim 42 (Previously Presented) The surface material of claim 37 that further includes silt.

Claim 43 (Previously Presented) The surface material of claim 37 that further includes decomposed granite.

Claim 44 (Previously Presented) A method for repairing a surface material, the surface material comprising clay and wax of a type to make the surface material malleable and to add cohesiveness between the particles, the method comprising the step of working the surface material with a heated tool.

Claim 45 (Previously Presented) The method of claim 44 wherein the tool is a rake and the working includes raking the surface material.

Claim 46 (Previously Presented) The method of claim 44 wherein the tool is a roller and the working includes compacting the surface material.

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